

III. Posterior wings lanceolate, with prolonged point.

1. *Elachista æratella*.

IV. Posterior wings lanceolate (point not prolonged).

1. *Elachista fusco-ciliella*. Cilia of posterior wings fuscous.
2. *modestella*. Cilia of posterior wings ochreous.

VI. *A Monograph of the British Species of the Genus*
Micropteryx of Zeller. By H. T. STAINTON, Esq.

[Read February 4th, 1850.]

THIS interesting and very distinct group of insects is sadly in want of investigation; the metamorphoses of none of the species are known, and several of our species were in such confusion, that in my catalogue I lumped together, as one species, three which are truly quite distinct.

The number of species will probably be much augmented by more active investigations; several of the known species appear very early in the season,—for instance, *purpurella* in February, and *unimaculella* and *semipurpurella* in March; and it is exceedingly probable that other equally early species lurk undetected. Several other species occur on the continent.

From the affinities of this group to the *Adelæ* (long horns), of which the larvæ are known to be case-bearers, feeding on various plants, there is little doubt but that the larvæ of these insects feed in a similar way; and if those collectors who take *calthella* in plenty, would devote a little of their time to the furtherance of science, by searching for the larvæ and pupæ of that insect, though they might not enrich their collections by so doing, they would have a better claim to the title of Entomologists.

The genus is thus characterized by Zeller, in the *Isis*, 1839: "With thickly woolly head, in the hairs of which the long convergent downy-haired palpi are concealed, the antennæ hardly longer than the body, the wings moderately long-fringed, the posterior oval-lanceolate."

The structure of the palpi is very peculiar; they are six-jointed, and are folded over themselves, so that the extremity lies

just over the base. Curtis says, "palpi longer than the head, *porrected*;" but this is not the case in any of the specimens I have observed. But Mr. Curtis assures me that he believes the palpi are porrected when the insect is alive; this *may be* so, though I must confess I should very much doubt it. The hairs of the head, which in some cases furnish good specific distinctions, are easily rubbed off, and the head then assumes a black appearance, whatever may have been the colour of the hairs; this is apt to occasion mistakes: the shortness of the antennæ is very striking in most of the species, indeed in some they have quite the appearance of having been broken; and in the subdiaphanous posterior wings we have another peculiarity of the genus.

According to the neuration of the wings, the genus divides into two sections; in the first section the apical nervure is simple from the cell, in both wings, and in the second section this nervure has a fork towards the costa, between the cell and the apex, in both wings.

Section A. *ERIOCEPHALA*, Curtis.

Section B. *MICROPTERYX*, Hübner.

The following is my arrangement of the British species:

A.

α Head ferruginous.

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| 1. <i>Calthella</i> . | Anterior wings golden, with the base entirely purple. |
| 2. { <i>Aruncella</i> ♀. | Anterior wings golden, with the base purple on the costa. |
| ♂. | Anterior wings golden, with two silvery fasciæ, and a silvery spot. |
| 3. <i>Allionella</i> . | Anterior wings purple, with two golden fasciæ, and a golden spot towards the apex, reaching neither margin. |
| 4.* <i>Subammanella</i> . | Anterior wings purple brown, with two yellowish fasciæ and a yellowish spot. |
| 5. <i>Rubrifasciella</i> . | Anterior wings greenish golden, with a reddish spot on the costa at the base, a reddish fascia before the middle, and another bifurcate beyond the middle. |

* I cannot speak confidently of the colour of the head of this species, my unique specimen having met with a misfortune and lost its head; I believe it *was* ferruginous.

β Head blue-black.

6. *Mansuetella*. Anterior wings greenish golden, with three very indistinct reddish fasciæ.

B.

α Head grey.

7. *Subpurpurella*. Anterior wings greenish golden, with a faint paler spot towards the anal angle.
 8. *Semipurpurella*. Anterior wings purple, irrorated with pale golden; antennæ more than half the length of the anterior wings.
 9. *Sparmannella*. Anterior wings golden, with numerous transverse purple fasciæ.

β Head dark fuscous.

Antennæ less than half the length of the anterior wings.

10. *Purpurella*. Anterior wings golden, with numerous irregular purple fasciæ, and the veins purple.
 11. *Unimaculella*. Anterior wings golden purple, with a conspicuous whitish spot at the anal angle.

Sp. 1. *Calthella*, Linnæus. (Plate III. fig. 1—4.)

Capillis ferrugineis; alis anticis aureo-brunneis basi purpureo, a costa usque ad marginem interiorem; alisque (post mortem) sulcatis.

Calthella, Linn. S. N. 895, 422; F. S. 367, 1432; Wien. Ver. 144, 36; Fabricius, Ent. Syst. 3, 2, 340; Haworth, Lep. Brit. (α ♀ & γ ♂), 573, 43; Treitschke, ix. 2, 117; Stephens, Ill. iv. 361, 18; Duponchel, xi. 401, pl. 302, fig. 6; Curtis, Brit. Ent. vol. xvi. folio 751; Zeller, Isis, 1839, p. 185; Zetterstedt, Ins. Lapp. 1008, 12; Eversmann, Fauna Lep. V. U. 587, 2; Stainton, Cat. Tin., p. 8.

Pusilella, Hübner, 341?

Sulcatella, Bentley, Zoologist, 1086.

Exp. alar. ♂ $3\frac{1}{2}$ lin., ♀ $4\frac{1}{2}$ lin.

Head of the male luteous, of the female ferruginous. Antennæ dark fuscous, about half the length of the anterior wings. Thorax golden brown. Abdomen, legs and tarsi dark fuscous. Anterior wings golden brown, with the base purple from the costa to the inner margin; when the insect is dead the wings have a sulcated appearance. (Zeller states that when alive they are even and

smooth; but never having seen the species alive, I cannot verify this statement.) Posterior wings pale grey, the apical half tinted with purple. The larvæ, which I have no doubt are case-bearers, most probably feed on the Ranunculaceæ.

This species was taken last summer in considerable plenty near Warrington, by Mr. Nicholas Cooke, and also near Huddersfield, by Messrs. Inchbald and Dunning, from whom I received several pairs taken in copulâ, which enabled me to ascertain the specific distinction between this and *aruncella* ♀.

This distinction consists in the purple at the base of the wing, extending to the inner margin in *calthella*, whereas in *aruncella* it never reaches the inner margin. *Calthella* has also (when dead) a more sulcated appearance.

Mr. Bentley first directed the attention of the Entomologists of this country to the existence in this genus of two very closely allied species, which were distinguished by one having the anterior wings sulcated, and the other having them smooth, but unfortunately he named the present species afresh as *sulcatella*, and applied the name *calthella* to the ♀ *aruncella*. It is true he alludes to the sexes of his *calthella*, but in this there must have been some mistake, and in his description of *sulcatella* he says, head of the male *black*; this is only the case when the luteous hairs have been rubbed off, which, as Treitschke mentions, is very frequently the case.

Haworth's *calthella* is, I have no doubt, our species, from the particular mention of the "basi læte purpureæ;" his var. β "absque purpureo" may be *aruncella* ♀, the *calthella* of Bentley. The Linnæan insect frequenting the *Caltha* is, I have no doubt, also the present species, as *aruncella* shows no particular predilection for the Ranunculaceæ, whereas our species most decidedly is extremely partial to them, though found also on other flowers in their vicinity.

In Duponchel's figures of this genus there is a continuous error of the antennæ being represented much too long; this is important, as the extreme shortness of the antennæ is a peculiarity of the group; and in some species the relative lengths of the antennæ furnish distinctive characters.

Sp. 2. **Aruncella*, Scopoli. (Plate III. fig. 5, 6.)

Capillis ferrugineis; ♂ alis anticis aureo-brunneis, basi ad costam purpureo, maculâ argenteâ transversale ante, fasciâque rectâ argenteâ pone medium, et post hanc maculâ parvâ argenteâ

* See Remarks at page 40.

prope costam; ♀ *alis ant. aureo-brunneis, basi ad costam solùm purpureo, immaculatis.*

Aruncella, Scop. Faun. Carn. p. 254, No. 660; Zeller, Is. 1839, 185; Sta. Cat. Tin., p. 9.

♂ *Seppella*, Fab. 3, 2, 320; Haw. L. B. 573, 44; Steph. Ill. iv. 362, 20.

♂ *Podevinella*, Hbn. 342; Treit. ix. 2, 119; Dup. xi. 399, pl. 302, fig. 5.

♂ *Concinnella*, Steph. Ill. iv. 361, 19?

♀ *Calthella*, Bentley, Zoologist, 1086.

Exp. alar. ♂ 3 lin. ♀ 4 lin.

Head and face ferruginous. Antennæ dark fuscous, in the ♂ nearly as long as the anterior wings, in the ♀ about half the length of the anterior wings. Thorax golden brown. Abdomen, legs and tarsi dark fuscous. Anterior wings of the ♂ golden brown or greenish golden, with the costa at the base purple; a little before the middle of the wing is a transverse silvery spot which reaches neither margin, and about the middle of the wing is a silvery fascia placed rather obliquely, it being nearer the base on the costa than on the inner margin; beyond this is a small silvery spot near the costa. Cilia golden brown. Anterior wings of the ♀ (entirely destitute of the silvery markings) golden-brown, with the costa at the base purple. Posterior wings pale grey, with the apical half tinted with purple.

A common species; I have several times found it in plenty,—in a wood near Ambleside and in a lane near Coniston in June, 1846, and on a grassy bank near Carron in June, 1847, when I took several pairs in copulâ; last year I again took it in the same place. The sexes are so different that they have long been considered as distinct species, although Scopoli appears to have been aware of the several discrepancies.

The ♀ much resembles *calthella*, but independent of the wings not being sulcate; the base of the anterior wings is never purple to the inner margin, but only a little way from the costa.

The ♂ somewhat resembles *subammanella* and *Tinea bistrigella*, but is distinguished from the former by its more golden anterior wings, silvery spots and fascia, whereas in *subammanella* there are two entire yellowish fasciæ on the purple anterior wings. From *T. bistrigella* it is distinguished by its ferruginous head (Stephens, it is true, says "head black"—this, probably, arises from his description being made from a worn specimen,) and also by the differently coloured anterior and posterior wings; the latter in the *Micropteryx* being subdiaphanous, and purplish at the apex; in the *Tinea* they

are opaque, unicolorous, ash-coloured; besides, in *bistrigella* the first fascia is entire, and the second arched, and frequently interrupted, and also placed more posteriorly than in *aruncella* ♂.

Sp. 3. *Allionella*, Fabricius. (Pl. III. fig. 7.)

Capillis ferrugineis; alis anticis purpureis, fasciis duabus transversis aureis, prima recta ante, altera obliqua pone medium, maculaque irregulari aurea juxta costam, apicem versus.

Allionella, Fab. 3, 2, 321; Zell. Isis, 1839, 185; Sta. Cat. Tin. 9.

Ammanella, Hbn. 388; Treit. ix. 2, 125? Steph. Illust. iv. 362, pl. xli. fig. 2; Zett. Ins. Lapp. 1008, 10 (non Dup.)

Exp. alar. 5 lin.

Head and face ferruginous. Antennæ black, more than half the length of the anterior wings. Thorax fuscous. Abdomen, legs and tarsi dark fuscous. Anterior wings purple or brownish purple, with a golden fascia nearly straight before the middle, and another placed rather obliquely beyond the middle; midway between this and the apex of the wing is a large irregular gold spot nearer the costa than the inner margin. Posterior wings pale cinereous, with a purple gloss towards the apex.

Hitherto a scarce species with us; I have met with it in Torwood, Stirlingshire, in June, but very sparingly, and last summer I beat a single specimen from a mountain-ash, near Airthrey, Stirlingshire. Mr. Douglas took a specimen last May in West-Wickham Wood, and Mr. Dunning met with it among oaks near Huddersfield. Treitschke says of his *ammanella*, "only the size of *calthella*;" he was probably comparing it with the ♀ *calthella*, which is much larger than the ♂; he begins his description of *Ander-schella* (which we know to be the same size as *Allionella*) by saying "size and form of *ammanella*." In Mann's Catalogue, *ammanella*, Tr., is placed as distinct from *ammanella*, Hbn., which led me to imagine that it might be my *subammanella*, as indeed, if it were the size of *calthella* ♂, it probably would be.

4. *Subammanella*, Stainton. (Pl. III. fig. 8.)

Alis anticis brunneo-purpureis, fasciis duabus luteis rectis, una ante, altera paulo pone medium, maculaque parva lutea post fasciam secundam; ciliis fuscis, apice albidis.

Subammanella, Sta. Cat. Tin. 9.

Exp. alar. 3 lin.

Anterior wings purple brown, with two straight yellowish fasciæ, one near the base, the other a little beyond the middle, and a small

round yellowish spot immediately beyond the second fascia; cilia fuscous, but at the extreme apex whitish.

The above imperfect description is all I am able to give, having had an accident with my unique specimen, of which I have now only the two anterior wings remaining.

This specimen I took in Torwood, Stirlingshire, July 18th, 1848, among mixed underwood.

From the preceding it is at once distinguished by its size, the straighter fasciæ, and smaller spot; from *Tinea bistrigella*, which it more closely resembles, the purple-brown anterior wings and yellowish (not whitish) fasciæ immediately distinguish it.

Zetterstedt has an *Adela abalienella* (Ins. Lapp. 1008, 9), which is very probably this species; he says, "alæ nitidæ, anticæ ferrugineo-fuscae, fasciis duabus integris rectis transversis albis, una ante medium et altera in medio—fimbria fusca, summo apice albo." The position and form of the fasciæ are here well given, but the colour is white instead of yellowish (thus more appropriate to *bistrigella*); the mention of the apical spot in the cilia also appears to point out the present species, but the spot on the disk is omitted.

Sp. 5. *Rubrifasciella*, Haworth. (Pl. III. fig. 9.)

Capillis ferrugineis; alis anticis nitidis, viridi-aureis, macula basale rufescente ad costam, fascia obliqua rufescente ante, alteraque duabus furcis, pone medium.

Rubrifasciella, Haw. Lep. Brit. 572, 41; Sta. Cat. Tin. p. 9.

Hellwigella, Steph. Illust. iv. 360, 16 (non Hbn.)

Anderschella, Dup. xi. 403, pl. 302, fig. 7, (non Hbn.)

Exp. alar. 4 lin.

Head and face ferruginous. Antennæ black, about half the length of the anterior wings. Thorax purplish. Abdomen, legs and tarsi dark fuscous. Anterior wings very glossy, greenish golden, with a reddish spot on the costa at the base, an oblique reddish fascia a little before the middle (which is nearest the base on the costa and does not reach the inner margin); and beyond the middle another reddish fascia, with two branches, one terminating on the costa, the other in a reddish spot towards the apex. Posterior wings pale grey, with a purple tint towards the apex.

Not generally a common species; it occurs in May, and appears rather partial to chalky districts. I have met with it on the Dartford Heath fence, and Mr. Sircom takes it at Brislington.

Haworth has well described this species, but errs in giving *Hellwigella*, Hbn. as a synonym.

Duponchel's figure and description are very good, but there is some mystery attending his insect, as he says he received it from Herr Fischer von Röslerstamm, under the name of *Anderschella*, which is inconceivable, as *rubrifasciella* was not known in Germany in 1839, though Herr Mann now sends us the insect, but with a manuscript name; moreover, the true *Anderschella* (a very beautiful species) is figured and described by Duponchel as *ammanella* (vol. xi. 404, pl. 302, f. 8), and he says it was sent to him by Herr Fischer von Röslerstamm under that name.

Haworth's *Tinea sanguinella*, of which he says "præcedentis (*rubrifasciellæ*) forte varietas," does not belong to this genus; it is the *Tortrix rutilana* of Hübner. Haworth's specimen is in Mr. Stephen's collection.

Sp. 6. *Mansuetella*, Zeller.

Capillis atris; alis anticis aureo-viridis, macula basale ad costam, fascia ante medium, apiceque, rufescentibus, obsoletis.

Mansuetella, Zell. Fünfter Bericht des Schlesischen Tauschvereins, 1844, p. 16.

Exp. alar. 4 lin.

Head and face deep black, almost blue black. Antennæ black, about half as long as the anterior wings. Thorax, abdomen, legs and tarsi fuscous. Anterior wings greenish golden, with some very indistinct reddish markings, namely, a costal spot at the base, and a fascia before the middle, and the apical half of the wing is entirely reddish; cilia cinereous. Posterior wings pale grey, with the apex purplish; cilia cinereous.

Mr. Douglas has two specimens which he took some years back, along with *Calthella*. From Zeller's account the species occurs near Glogau, at the same time as *Calthella*, on *Sorbus aucuparia* and *Spiræa ulmaria*.

It is readily distinguished from every other known British species of the genus by its deep black head; but independently of this character, it may be recognised by being of the size of *Calthella*, with the markings on the anterior wings somewhat resembling *rubrifasciella*, only more indistinct.

Sp. 7. *Subpurpurella*, Haworth. (Pl. III. fig. 10—13, 18.)

Capillis cinereis; alis anticis aureo-viridis, macula pallidiore fere obsoleta ad angulum anale, posticis cinereis apicibus purpurascens.

Subpurpurella, Haw. Lep. Brit. 571, 37; Steph. Illust. iv. 359, 11; Sta. Cat. Tin. p. 9.

Exp. alar. 6 lin.

Head and face cinereous. Antennæ fuscous, about half the length of the anterior wings. Thorax, abdomen, legs and tarsi fuscous. Anterior wings bright golden green, with a faint appearance of a paler spot at the anal angle, and a still fainter appearance of another midway between this and the apex of the wing; cilia fuscous. Posterior wings pale grey, with the apex purplish; cilia cinereous.

The commonest species of the genus frequenting oaks in May. Its greenish anterior wings distinguish it readily from all its congeners, except *Calthella* and *Aruncella* ♀; from these, however, it is at once distinguished by its size and cinereous head.

Haworth gives three varieties, but they appear to have been merely specimens in different degrees of preservation.

Sp. 8. *Semipurpurella*, Stephens. (Pl. III. fig. 17.)

Capillis cinereis; alis anticis purpureis aureo-irroratis, maculaque pallida subindistincta ad angulum anale; antennis longioribus quam dimidium alis anticis.

Semipurpurella, Steph. Ill. iv. 359, 12.

Solierella, Dup. xi. 407, pl. 302, f. 11?

Exp. alar. 5—7 lin.

Head and face fuscous, clothed with cinereous hairs, which apparently are easily rubbed off. Antennæ dark fuscous, *more than half the length of the anterior wings*. Thorax, abdomen, legs and tarsi fuscous. Anterior wings purple, with numerous golden irrorations, and generally with a pale golden or whitish spot at the anal angle, not however as distinct as in *unimaculella*. Posterior wings pale grey, almost transparent, with the apex purplish; cilia grey.

Not a scarce species among birches in March and April; occurring plentifully at West Wickham Wood and other places. The difficulties in the genus begin with this species, which in my Catalogue I have lumped together with *purpurella* and *unimaculella* as one species; these are, however, truly distinct, and with fine specimens they are easily separated, though in the ordinary run of specimens found in collections it is no easy matter to say to which they should be referred. One main reason for our specimens being so poor is, that we do not collect them soon enough, they should be sought for in March; by

delaying to collect them till April, the specimens become wasted. I have no doubt many might be met with in February in forward seasons. Haworth distinctly states that Mr. Hatchett took two specimens of *purpurella* in copula in February.

Semipurpurella differs from *purpurella* in being generally larger, in having the hairs of the head cinereous instead of dark fuscous, and in the purple of the anterior wings not being disposed in fasciæ or streaks; but it is principally distinguished by having much longer antennæ. It differs from *unimaculella* also by the greater length of the antennæ and by the less distinct spot at the anal angle, and the anterior wings being more irrorated with golden.

Sp. 9. *Sparmannella*, Fabricius. (Pl. III. fig. 14.)

Capillis cinereis; alis anticis aureis, numerosis fasciis purpureis irregulariter transversis, ciliis cinereo-luteis fuscisque variis; ciliis alarum posteriorum lutescentibus.

Sparmannella, Fabr. 3, 2, 324; Hbn. 408; Dup. xi. 405, pl. 302, f. 9; Zell. Isis, 1839, p. 185; Sta. Cat. Tin. p. 9.

Auropurpurella, Haw. Lep. Brit. 572, 39; Steph. Illust. iv. 360, 14.

Exp. alar. 4 lin.

Head and face cinereous. Antennæ dark fuscous, not half as long as the anterior wings. Thorax and abdomen dark fuscous. Legs and tarsi pale fuscous, the ends of the joints dark. Anterior wings gold coloured, with numerous irregular transverse purple fasciæ, the thickest of which is a little beyond the middle, and is furcate on the inner margin; the gold coloured space between its forks, being the largest unicolorous portion of the wing, appears rather conspicuous; cilia varied yellowish grey and fuscous. Posterior wings pale grey, the apical half purple; cilia pale yellowish.

A scarce species with us, occurring among birches in May. Mr. Douglas took a specimen at West Wickham Wood last May.

Zeller says, "from the middle of April to the middle of May, on the twigs of oaks, alders, especially birches."

Sparmannella is not likely to be confounded with any species except *purpurella*; from this it differs in the hairs of the head being cinereous instead of dark fuscous, in the veins of the anterior wings not being purple, and in the reticulations being more delicate; in the broader anterior wings having varied cilia, and in the cilia of the posterior wings being yellowish and not cinereous.

Sp. 10. *Purpurella*, Haworth. (Pl. III. fig. 15.)

Capillis fuscis; alis anticis aureis, numerosis fasciis irregularibus, venisque purpureis, ciliis cinereo-luteis; ciliis alarum posticarum cinereis.

Purpurella, Haw., Lep. Brit. 571, 38; Steph. Ill. iv. 360, 13;
Donzelella, Dup., xi. 408, pl. 302, 12?

Exp. alar. 5 lin.

Head and face dark fuscous. Antennæ fuscous, not half the length of the anterior wings. Thorax and abdomen dark fuscous. Legs and tarsi fuscous. Anterior wings golden with a slight greenish tinge, with numerous irregular purple fasciæ, and the veins purple; thus much concealing the ground colour, as in *Sparmannella* the largest portion of the wing left of the ground colour is at the anal angle; cilia yellowish grey. Posterior wings narrower than in *unimaculella*, pale grey, with a slightly purple tint towards the apex; cilia pale grey.

Not scarce. Mr. Henry Doubleday writes me word, that in Epping Forest it often swarms on birches at the end of March, along with *semipurpurella*; and it is owing to his calling my attention to this species and its allies, that I discovered the great blunder I had committed in my Catalogue with regard to them. (I shall always feel much obliged to any entomologist who will call my attention to any point in which he may think I have erred, as it is only by such criticism of one another that truth can be elicited and progress made.)

Purpurella differs from *semipurpurella* in being smaller, with much shorter antennæ, in the hairs of the head being dark fuscous, and in the anterior wings being streaked and veined with purple; it differs from *unimaculella*, which it resembles in size, also by the streaking and veining of the anterior wings, by the anal spot being less conspicuous, and by the posterior wings being narrower and more pointed. The differences between *purpurella* and *Sparmannella* have been already mentioned under the latter species. Haworth's *Tinea rubroaurella* (Lep. Brit. 572, 40) is apparently an injured specimen of this species; he says, "alæ anticæ rubro sive purpureo-aureæ; lente puncto postico aureo, in quo punctulum minutum fuscum. In medio marginis tenuioris punctum alium aureum;" which certainly rather appears as if he had had a specimen of *Adela fibulella* before him, yet the insect in Mr. Stephens' collection, labelled by Haworth rubro-aurella, is truly a *Microp-teryx*, and apparently identical with *purpurella*.

Zetterstedt has an *Adela cicatricella* (Ins. Lapp. 1008, 13), which may perhaps be this species. He says, "alis anticis aureo-violaceoque irroratis, posticis purpurascenti griseis ♀." "*Ad. Calthella* nonnihil major. Alæ anticæ læves, nec striatim impressæ aureo-pallido-cupreoque undique, crebre irroratæ, fimbria grisea; posticæ purpureo-micantes. *Tin. Sparmannella*, Thunb. et Fab., huic similis, sed illa est fere duplo major et alis anticis aureis punctis striguliformibus transversis undique adspersis, a nostra certe distincta." This would all appear to point out our *purpurella*, except the size; but he distinctly says hardly larger than *Calthella*, and little more than half the size of *Sparmannella*,—now our insect is as large as *Sparmannella* and nearly twice the size of *Calthella*.

Zeller's *fastuosella* (Isis, 1839, p. 185) must also come very near *purpurella*; he says, "very like *Sparmannella*, but certainly distinct; larger, the wings narrower, with fine violet and steel-blue scales, the posterior wings paler; flies after the beginning of May, near Glogau, on old blooming sloe-bushes."

Sp. 11. *Unimaculella*, Zetterstedt. (Pl. III. fig. 16.)

Capillis fuscis; alis anticis aureo-purpureis, macula albida ad angulum anale.

Unimaculella, Zett., Ins. Lapp. 1008, 11; "alæ anticæ purpureo-aureæ, macula ad angulum ani alba."

Exp. alar. 5 lin.

Head and face dark fuscous, almost black. Antennæ dark fuscous, about half the length of the anterior wings. Thorax, abdomen, legs and tarsi dark fuscous. Anterior wings greenish-golden with a purple gloss, with a conspicuous whitish spot (slightly curved outwardly) on the inner margin at the anal angle; cilia grey. Posterior wings broader than in the preceding, pale grey, with the apex purple; cilia grey.

Scarce with us at present; most of the specimens I have seen have occurred in the north of England. Mr. Douglas took a specimen at West Wickham Wood last April; it probably also appears in March.

Unimaculella is distinguished from *semipurpurella* by its smaller size, shorter antennæ, darker head, and paler spot at the anal angle of the anterior wings. In size it resembles *purpurella*, but here again it is at once recognised by its paler spot at the anal angle, and by the want of the purple fasciæ and veins, and by the broader posterior wings.

Duponchel has an *Adela unipunctella* (xi. 370, pl. 302, fig. 10);

but in that, the spot is in the centre of the wing, not on the inner margin, and I strongly suspect his insect was a true *Adela*, but unfortunately the antennæ were broken off from the only specimen he had seen, so that we have no certain knowledge on that point. Duponchel's figures of this and *Donzelella* look rather singular from the paint used for the white spots having turned black.

I here conclude this imperfect essay, which will, I hope, lead to the investigation of the habits and transformations of our known species, and also to the discovery of new ones. I have not included the continental species in this memoir, although we have several new to us from Herr Mann, as only one of those, *Anderschella*, Hbn. Tr., is described; the others will probably be described in Zeller's paper on the *Microptera* taken in Tuscany by Herr Mann, which paper was commenced in the July number of the Zeitung of the Entomological Society of Stettin.

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Supplemental Note to the above Paper.

[Read July 1st, 1850.]

IN my Monograph of the genus *Micropteryx*, I have incorrectly described as *Aruncella*, Scopoli (see page 29), a distinct, but closely allied species; the name to be retained for the insect there described is *Seppella*, Fabricius, and its correct synonymy, should stand thus:

♂ *Seppella*, Fab. 3, 2, 320; Haw. L. B. 573, 44; Steph. Illust. iv. 362, 20.

♂ *Podevinella*, Hbn. 342; Treit. ix. 2, 119; Dup. xi. 399, pl. 302, fig. 5.

♀ *Calthella*, Bentley, Zool. 1086.

Aruncella, Sta. Cat. Tin. p. 9 (non Scop. non Zell.)

♂ *Eximiella* (Kollar), Zeller, Ent. Ztg. Feb. 1850, p. 62.

Whereas the synonymy of *Aruncella* will run thus:

Aruncella, Scop. F. C. p. 254, No. 660; Zeller, Isis, 1839, 185.

♂ *Concinnella*, Steph. Illustr. iv. 361, 19.

I now proceed to describe this latter insect.

Capillis ferrugineis, ♂ alis anticis aureo-brunneis, basi ad costam purpureo, fascia recta tenui argentea ante medium, maculaque indistincta argentea prope basin; ♀ alis anticis aureo-brunneis, basi ad costam solum purpureo, immaculatis.

Exp. alar. ♂ $3\frac{1}{2}$, ♀ 4 lin.

Head and face ferruginous. Antennæ dark fuscous, in the ♂ nearly as long as the anterior wings. Thorax golden brown, abdomen, legs and tarsi dark fuscous.

Anterior wings of the ♂ golden brown, with the costa at the base purple. Not far from the base is a rather faint silvery spot;

and rather before the middle of the wing is a slender, almost perpendicular, silver fascia. Cilia golden brown.

Anterior wings of the ♀ (entirely destitute of the silvery markings) golden brown, with the costa at the base purple.

Posterior wings pale grey, with the apical half tinted with purple.

Hitherto scarce in this country. Mr. Stephens has specimens from Darenth Wood, and Mr. Thomson once met with it on the grassy bank between Sydenham and Penge.

The best character by which to distinguish the ♂ of this species from the ♂ *Seppella* is the position and form of the fascia; it is *more slender, straighter, and placed nearer the base* than in *Seppella*. The entire absence of the silver spot on the costa towards the apex would appear at first sight a more decided character; but it is often no easy matter to see this spot in set specimens of *Seppella*; and I last week took a specimen of *Seppella* entirely destitute of this spot, and which I was therefore inclined to take for *Aruncella*. The anterior wings of *Seppella* ♂ are *narrower and greener* than those of *Aruncella* ♂. I am not at present aware of any character by which to separate the females of these two species.

Till I received from Herr Zeller specimens of this species as *Aruncella*, and of *Seppella* as *Eximiella*, I had not the slightest conception that my *Aruncella* and his were not identical. *Podevinella*, Tr., which Zeller gives as a synonym of *Aruncella*, is most certainly *Seppella*.

How many similar errors may lurk undetected for want of comparison of specimens, it is impossible to say.
